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FIRST NAMED INVENTOR **FILING DATE** ATTORNEY DOCKET NO. APPLICATION NO. 09/143,967 08/31/98 **BERTMAN** R RP9-95-017V **EXAMINER** 025299 TM02/0718 IBM CORPORATION HIIVNH B PAPER NUMBER PO BOX 12195 **ART UNIT** DEPT 9CCA, BLDG 002 RESEARCH TRIANGLE PARK NC 27709 2173 DATE MAILED:

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 16

Application Number: 09/143,967

Filing Date: 08/31/1998 Appellant(s): Bertram et al.

Robert A Voigt, Jr
For Appellant

MAILED

JUL 1 8 2001

EXAMINER'S ANSWER

Technology Center 2100

This is in response to appellant's brief on appeal filed 5/7/01 and the supplemental brief filed on 7/6/01.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences



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A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 37-45, 47-57, 59-69, 71-72.

1. Claims 46, 58, and 70 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the respective base claims and any intervening claims.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on 7/06/01 has <u>not</u> been entered because the appellants had failed to rewrite all limitation of claim 58 into its base claim.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues



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The appellant's statement of the issues in the brief is substantially correct.

Claims 46, 58 and 70 have been indicated as would be allowable if rewritten in independent form including all of the limitations of the respective base claims and any intervening claims.

(7) Grouping of Claims

Appellant's brief includes a statement that the claims do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,666,502	Capps	9/9/1997
5,367,619	Dipaolo et al	11/22/1994

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 37-45, 47-57, 59-69, 71-72 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office action, Paper No. 5.

(11) Response to Argument

The Capps reference. Capps teaches a data input technique implementable in a system, an apparatus, a graphical user interface, or as a computer readable medium (the



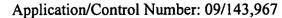


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abstract). In a disclosed embodiment, the data input technique is implemented in a pen-based computer having housing sized to be held and manipulated by the hand of a user (figure 2). The data input technique provides the user with a historical list of potential choices for the data input. The history list contains the most recently and/or frequently used data values for the data field that the user is inputting data (the abstract; col. 11, lines 1-7, lines 32-61). The list contains items that predicted as having reasonable probability (emphasis added) of being the data the user desired (col. 2, lines 30-35; col. 12, lines 19-20; col. 13, lines 38-43). Items in the list are ordered as to user preference, based on a weighted frequency and recency of used (col. 11, line 35 - col. 12, line 23; col. 13, lines 38-43). The user selects an item from the list for entering into the data field (col. 10, lines 15-27). The most probable item that likely to be selected by the user is the first item in the list (col. 11, lines 39-40). Thus Capps teaches a predictive widget to supply data entries, i.e., the means to predict the list of potential choices based on frequency and/or recency of used, with reasonable probability of being the data the user desired for entry in a data field. The first item in the list is the most probable entry to be selected by the user (i.e., most valid entry). It is noted that Capps fails to clearly teach that the item (the most probable item to be selected by the user) automatically fills-in the data field ("to supply a data entry for a defined data field", claim 37, line 14. Appellants' argument, page 9 second par.)

The Dipaolo et al reference. In the same field of electronic data entry system employing a expert system for supplying data entry to data fields (Summary of the Invention),





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Dipaolo et al teach a system/method for automatically fill-in a data field with an item determined as the only data entry (therefore is the most probable data entry), thus save the user from selecting the item for the data field (Dipaolo's abstract; col. 2, lines 43-60; col. 6, lines 20-38).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine Dipaolo's teaching of auto-fill to Capps's data entry for automatically fill-in a data field with a top-most item in Capps' historical list, which is the most probable entry to be selected by the user. Motivation of the combining is for the ease of data entry by saving the user from manually selecting the entry.

The appellants argue that there is no suggestion to combine the references. It has been held that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of skill in the art to combine Dipaolo's teaching of automatic filling a data field with an item determined as the most probable item (the only item) to Capps for automatically filling a data field with the most probable item (top-most item from the historical list). Capps as combined with Dipaolo ease user input by saving the user from manually selecting the top-most item from the historical list for filling-in a data field.





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The appellants argue that Dipaolo's auto-fill can not be combined with Capps because Dipaolo teach the auto-fill when there is only one item in the list of valid entries while Capps has more than one item to select from. It appears that the appellants took the position that Capps, if combined with Dipaolo, only can auto-fill those data fields that have only one entry (the brief, page 8). It has been held that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Furthermore, Capps teach the providing a list of data entries having a most probable item to be selected by the user. Dipaolo's teaches the automatic filling a data field with an item determined as the most probable item (the only item). Capps as combined with Dipaolo ease user input by saving the user from manually selecting the top-most item from the historical list for filling-in a data field. In Capps figure 5, the top-most probable item to be selected by the user is "Diane Penn". Capps as combined with Dipaolo, the top-most probable "Diane Penn" would be automatically fill-in data field 184.

The appellants further argue that Capps as combined with Dipaolo would change the principle of operation in Capps. This argument has no support from either Capps or Dipaolo.

As can be appreciated by one of skill in the art, by automatically fill-in the data field 184 with



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the name "Diane Penn" as a default entry (Capps' figure 5), the system eases the user input from selecting the entry yet provides the user a list of possible selections.

The appellants further argue that the combination of Capps and Dipaolo do not teach or suggest "exercising a predictive widget to supply a data entry for a defined data field". As per the appellants, Dipaolo teaches the auto-fill when there is only one single item therefore there is nothing predictive about the entry of the item (the brief, page 9, 1st full par.) From the argument, it appears that the appellants took the position that the claimed "predictive widget" predicts a data entry from a list of items. However the language "exercising a predictive widget to supply a data entry for a defined data field" can be reasonably interpreted as exercising a predictive widget to supply a list of data entries which contains "a data entry" for a defined data field, i.e., the predictive widget predicts a list of data entries rather than an entry from the list as narrowly interpreted. It has been held that claims should be given their broadest reasonable interpretation (In re Pearson, 181 USPQ 641 (CCPA 1974)). The language of the claims must particularly point out and distinctly claim the subject matter of the invention, without limitations imported from the specification (In re Lundberg, 113 USPO 530 (CCPA 1957)). In Capps, a predictive widget supplies data entry 220, based on frequency and/or recency of used, for a defined data field 184 (figure 5B). In Dipaolo, an expert system supplies a list of valid data entries for a data field (col. 2, lines 43-68).

The appellants further argue that since Dipaolo teaches only one data entry therefore unable to supply *one of* (emphasis added) a predictive default and a predictive fill. It has been



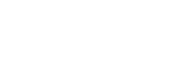
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held that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The list of most probable choices disclosed by Capps as combined with Dipaolo autofill met the language "one of a predictive default and a predictive fill" as recited in the claim.

As for the limitation "storing a predictive list and selecting a predictive default entry from the predictive list based on a predetermined algorithm", the appellants argue that since Dipaolo teaches only one entry value therefore does not teach the selecting a predictive default entry from the predictive list as claimed. Again, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Capps discloses the storing of a predictive list (historical list) based on a predetermined algorithm, i.e., the algorithm for predicting most probable data entry from a history of frequency and/or recency of used together with weight values (figure 8). Capps as combined with Dipaolo allows a predictive default, which is the top-most probable entry value to be selected from the historical list.

In response to the argument that the combined references do not teach a predictive list based upon the recency (claims 43, 55, 67) or frequency alone (claims 44, 56, 68), the language of the claims do not exclude recency from frequency or vice versa. Furthermore, Capps teach a predictive list that contains the most recently <u>and/or</u> frequently used data values





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(see the abstract). The language "and/or" disclosed by Capps being interpreted as the list contains data values that are either the most recently used, or frequently used, or both.

In response to the argument that the combined references do not teach a predictive list based upon a user selected weighted determination of the recency and frequency of use of listed data entry, Capps discloses a predictive list that has data values ordered based upon a user selected weight determination of the recency and frequency of used (col. 11, lines 35-61; col. 12, lines 4-23).

Claims 46, 58 and 70 have been indicated as would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The appellants' arguments with respect to these claims are now moot in light of the allowance of the claims.





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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Huynh-Ba July 15, 2001

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